

Claims

1. Catheter (1) having a catheter body (2), the interior of which forms a first catheter lumen (4), which serves to accommodate a guide wire (15) during the introduction of the catheter into the body of a patient, having at least one partition (5) disposed in the interior, which divides off at least one further catheter lumen (6) in the interior,

characterized in that the catheter body (2) has a tubular outer wall (3) and that the cross-sectional area (F2) of the further catheter lumen (6) is smaller than the cross-sectional area (F1) of the first catheter lumen (4), and the further catheter lumen (6) is disposed in such a manner that it has a wall section (7) that is part of the tubular outer wall (3).

2. Catheter according to claim 1, characterized in that the cross-sectional area (F1) of the first catheter lumen (4) and the cross-sectional area (F2) of the further catheter lumen (6) have a common axis of symmetry in the cross-sectional plane, and the quotient of the cross-sectional area (F1) of the first catheter lumen (4) and the cross-sectional area (F2) of the further catheter lumen (6) is greater than the square of the quotients of the width (D1) of the first catheter lumen (4),

measured along the common axis of symmetry, and the width (D2) of the further catheter lumen (6), measured along the common axis of symmetry.

3. Catheter according to claim 1 or 2, characterized in that the partition (5) runs in arc shape over at least one section of same.

4. Catheter according to claim 3, characterized in that the arc-shaped partition (5) has a convex side that faces the first catheter lumen (4), and a concave side that faces the further catheter lumen (6).

5. Catheter according to one of the preceding claims, characterized in that the cross-sectional area (F1) of the first catheter lumen (4) has a rounded sickle shape.

6. Catheter according to one of the preceding claims, characterized in that the cross-sectional area (F2) of the further catheter lumen (6) is round.

7. Catheter according to one of the preceding claims, characterized in that a temperature sensor is disposed in the further catheter lumen (6).

8. Catheter according to claim 7, characterized in that the temperature sensor is disposed in the vicinity of the catheter tip (9).

9. Catheter according to claim 6 or 7, characterized in that the cross-sectional area of the temperature sensor fills the cross-sectional area of the further catheter lumen (6) by at least four-fifths.

10. Catheter according to one of claims 7 to 9, characterized in that the cross-sectional area of the temperature sensor fills the cross-sectional area of the further catheter lumen (6) completely.

11. Catheter according to one of the preceding claims, characterized in that an optical fiber sensor is disposed in the further catheter lumen (6).

12. Catheter according to one of the preceding claims, characterized in that the further catheter lumen (6) is open in the region of the catheter tip.

13. Catheter according to one of claims 1 to 11, characterized in that the further catheter lumen (6) is closed in the region of the catheter tip.

14. Catheter according to one of the preceding claims, characterized in that the catheter body is made from plastic having a Shore hardness of 60D to 85D.

15. Catheter according to claim 14, characterized in that the plastic is polyurethane.

16. Catheter system according to one of the preceding claims, having a guide wire (15), characterized in that the guide wire (15) has a diameter that amounts to 65% to 95% of the distance (D1) between the partition (5) and the outer wall (3).